

What is claimed is:

1. An adaptive communication system comprising a first communication device and a second communication device, said first communication device being adapted for use with a plurality of communication systems, said first communication device transmitting a first request signal for requesting download of data to said second communication device, said second communication device transmitting data attribute information indicative of contents of said data to said first communication device after reception of said first request signal, said first communication device selecting one of said plurality of communication systems based on said data attribute information after reception of said data attribute information, said first communication device transmitting a second request signal for requesting said download through said selected communication system to said second communication device, said second communication device transmitting said data to said first communication device through said selected communication system after reception of said second request signal, said first communication device receiving said data.

2. An adaptive communication system according to claim 1, wherein said first communication device selects said one of said plurality of communication systems also based on system attribute information of each one of said plurality of communication systems besides said data attribute information.

3. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a communication type used in said each one of said plurality of communication systems.

4. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a communication protocol used in said each one of said plurality of communication systems.

5. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of an encryption means used in said each one of said plurality of communication systems.

6. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a multiplexing method used in said each one of said plurality of communication systems.

7. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a communication rate used in said each one of said plurality of communication systems.

8. An adaptive communication system according to claim 2,

wherein said system attribute information includes information indicative of a media searching method used in said each one of said plurality of communication systems.

9. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a place of transmission within said each one of said plurality of communication systems.

10. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a communication data format used in said each one of said plurality of communication systems.

11. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a media filtering method used in said each one of said plurality of communication systems.

12. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a media processing method used in said each one of said plurality of communication systems.

13. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a media description method used in said each one

of said plurality of communication systems.

14. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of a media encoding method used in said each one of said plurality of communication systems.

15. An adaptive communication system according to claim 2, wherein said system attribute information includes information indicative of transmission time specified in said each one of said plurality of communication systems.

16. An adaptive communication system comprising a first communication device and a second communication device, said first communication device being adapted for use with a plurality of communication systems and uploading data to said second communication device, wherein:

said first communication device selects one of said plurality of communication systems based on data attribute information indicative of contents of said data; and

said first communication device transmits said data to said second communication device through said selected communication system.

17. A communication control device comprising:

a data storage that stores data;

an attribute adder that adds data attribute information

indicative of contents of said data;

a first receiver that receives a first request signal for requesting download of said data;

a data attribute information transmitter that transmits said data attribute information in response to reception of said first request signal;

a second receiver that receives a second request signal for requesting said download, said second request signal being made based on said data attribute information; and

a data transmitter that transmits said data in response to reception of said second request signal.

18. A communication terminal adapted for use with a plurality of communication systems, said communication terminal comprising:

a control unit;

a first transmitting means that transmits a first request signal to a second communication device in response to operation of said control unit, said first request signal requesting download of data;

a first receiving means that receives data attribute information indicative of contents of said data from said second communication device after transmission of said first request signal;

a selecting means that selects one of said plurality of communication systems based on said data attribute information after reception of said data attribute information;

a second transmitting means that transmits a second request signal to said second communication device, said second request signal requesting said download through said selected communication system; and

a second receiving means that receives said data from said second communication device through said selected communication system after transmission of said second request signal.

19. A computer program for operating a computer of a communication terminal, said computer program executing steps of:

transmitting a first request signal to a second communication device in response to operation of a control unit of said communication terminal, said first request signal requesting download of data;

receiving data attribute information indicative of contents of said data from said second communication device after transmission of said first request signal;

selecting one of said plurality of communication systems based on said data attribute information after reception of said data attribute information;

transmitting a second request signal to said second communication device, said second request signal requesting said download through said selected communication system; and

receiving said data from said second communication device through said selected communication system after transmission of said second request signal.

20. A communication method comprising steps of:

transmitting a first request signal from a first communication device to a second communication device, said first request signal requesting download of data;

transmitting data attribute information from said second communication device to said first communication device after reception of said first request signal, said data attribute information being indicative of download time determined based on contents of said data;

transmitting a second request signal from said first communication device to said second communication device at said download time after reception of said data attribute information, said second request signal requesting said download;

transmitting said data from said second communication device to said first communication device after reception of said second request signal; and

receiving said data in said first communication device.

21. A communication control device comprising:

a data storage that stores data;

an attribute adder that adds data attribute information indicative of download time determined based on contents of said data;

a first receiver that receives a first request signal for requesting download of said data;

a data attribute information transmitter that transmits

said data attribute information in response to reception of said first request signal;

a second receiver that receives a second request signal for requesting said download; and

a data transmitter that transmits said data in response to reception of said second request signal.

22. A communication terminal comprising:

a control unit;

a first transmitting means that transmits a first request signal to a second communication device in response to operation of said control unit, said first request signal requesting download of data;

a first receiving means that receives data attribute information from said second communication device after transmission of said first request signal, said data attribute information being indicative of download time determined based on contents of said data;

a second transmitting means that transmits a second request signal to said second communication device at said download time after reception of said data attribute information, said second request signal requesting said download; and

a second receiving means that receives said data from said second communication device after transmission of said second request signal.

23. A computer program for operating a computer of a



communication terminal, said computer program executing steps of:

transmitting a first request signal to a second communication device in response to operation of a control unit of said communication terminal, said first request signal requesting download of data;

receiving data attribute information from said second communication device after transmission of said first request signal, said data attribute information being indicative of download time determined based on contents of said data;

transmitting a second request signal to said second communication device at said download time after reception of said data attribute information, said second request signal requesting said download; and

receiving said data from said second communication device after transmission of said second request signal.